Leverage Common Statewide Infrastructure

Initiative

Develop a timeline for leveraging common **statewide infrastructure** by utilizing the capabilities of ICN for network backbone, internet connectivity, network management, traffic management and application performance management. This positions the State's computing environment for long term value. It allows agencies to focus on core business needs rather than on defining technical infrastructure. Additional, this eliminates diffusion of technology and reduces Total Cost of Ownership (TCO).

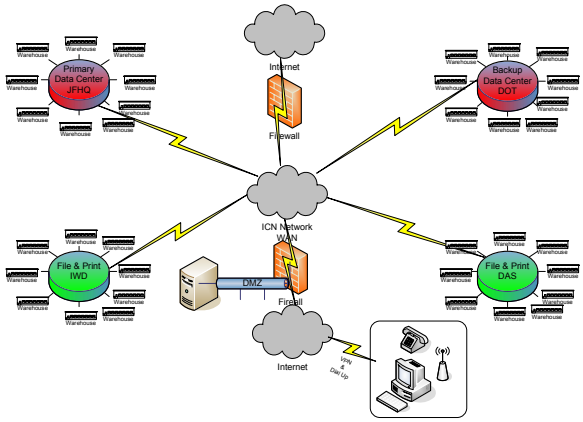
Statewide Infrastructure Model

As part of the Common Infrastructure initiative, consolidation of the Network Operations will focus on developing a statewide management structure to allow optimization of the departments' network and telecommunications requirements. This positions the State's computing environment for long term value. Agencies are then allowed to focus on core business needs rather than on defining technical infrastructure. Finally, it eliminates diffusion of technology and reduces Total Cost of Ownership (TCO).

A commonly shared technology infrastructure is the basis for a *Service Provider* model of governance.

The state of Iowa's infrastructure provides a common set of functions needed by many departments that are not specific to individual environments. Functions such as data center operations and large-volume printing are managed as a part of a shared technology infrastructure. This is similar to utility services—it is not appropriate for each agency to design and build custom networks, firewalls, messaging systems, etc. when fully featured and interoperable systems are available. These services must be highly reliable, cost effective, and serve as the foundation for agency mission applications.

Iowa currently has a robust, state owned network backbone in the Iowa Communications Network (ICN).

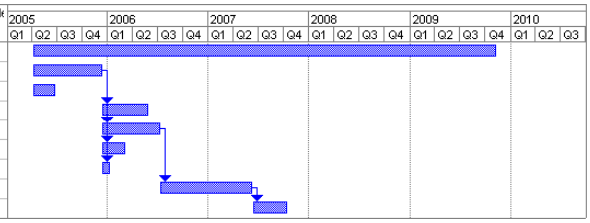


Team Mission Statement

The Infrastructure transition committee will offer input and feedback in the development of a timeline for leveraging common statewide infrastructure by utilizing the capabilities of ICN for network backbone, Internet connectivity, network management to the edge, traffic management and fault management. This positions the State's computing environment for long term value. It allows agencies to focus on core agency specific mission rather than on defining technical infrastructure. Additionally, this creates efficiencies in the use of technology and reduces Total Cost of Ownership.

Activity Level Project Timeline

ID	Task Name	Duration	Predecessors
1	Communications Plan	60 mons	
2	Network Topology Plan	9 mons	
3	Legal Plan	3 mons	
4	Network Management Plan	6 mons	2
5	Hardware Plan	7.5 mons	2
6	Human Resource Plan	3 mons	2
7	Customer Service Plan	1 mon	2
8	Migration Plan	12 mons	5
9	Implementation Plan	4.5 mons	8



Description of Activities

1. Communications Plan

Description

Communications of effects for change management internally and externally—keeping all employees and agencies and customers and union informed on process and changes.

Risk

Creating this plan bears a low risk.

Considerations

When performing this activity the impact of administrative policy must be kept in mind. A consistent effort at communication is necessary.

Expected Outcome:	A plan to effectively communicate the process and mitigate any cultural issues that may arise.
Timeframe:	Ongoing
Cost:	$10,000

2. Network Topology Plan

Description

Design of the network—physical, logical and virtual

Risk

This activity bears low risk.

Considerations

It is important to consider the costs to implement the plan, as well as any legal codes

that may come into play. Additionally, it is important to understand the business requirements, security, and citizen's needs. This is a living document and must keep in mind roles and responsibilities as well as inventory and standards compliance.

Expected Outcome:	A strong plan for the network topology to architectural standards that is the baseline for all other planning functions in this initiative.
Timeframe:	9 Months
Cost:	$750,000

3. Legal Plan

Description

Review of codes and regulations for Iowa, Common Carriage with FCC, Federal regulations/restrictions in departments, guidelines for public vs. private information.

Risk

There is high risk for this activity to assure that all codes and regulations are met in the transformation.

Considerations

An area of consideration is potential employee caps that may be of issue.

Expected Outcome:	This plan will result in a thorough understanding of the effects of the codes and regulations for Iowa, Common Carriage status with the FCC and other federal regulations and restrictions through the departments.
Timeframe:	3 Months
Cost:	$25,000

4. Network Management Plan

Description

A plan for the management of fault/traffic/change/performance/inventory/circuit contracting/intrusion detection/security/application monitoring/equipment contract management/reporting/NOC.

Risk

This plan bears low risk.

Considerations

Costs and regulations must be considered in the development of this plan. Some departments will be paying for new services that are outside their normal budget. Additionally, security and privacy must be kept in mind.

Expected Outcome:	This plan will result in a strategic plan for the delivery of identified management services to the agencies.

Timeframe:	6 Months
Cost:	$500,000

5. Hardware Plan

Description

Identification and determination of hardware requirements in conjunction with architecture standards to meet the network topology plan to support business requirements to the executive branch.

Risk

This plan has relatively low risk.

Considerations

The activity must keep in mind cost and regulations while developing the plan. Meeting the architectural standards for hardware may create a need for employee re-skilling. Additionally, there is interdependency with the architecture, procurement and data center teams.

Expected Outcome:	This activity will result in a selection of hardware standards to meet the architecture and business requirements.
Timeframe:	6-9 Months
Cost:	$50,000

6. Human Resource Plan

Description

Plan for personnel job descriptions/reporting structures/training/skills/re-skill/performance evaluations and standards/pay structure.

Risk

There is a high risk to this plan as it directly impacts the key resources in technology—the personnel.

Considerations

There must be adequate funding for training as the personnel will be undergoing functional changes. It is imperative to plan for this training in conjunction with the union. Human Resources will be a key partner in this effort.

Expected Outcome:	The outcome of this activity will be a fully planned framework for all the personnel affected by the change.
Timeframe:	6 Months
Cost:	$25,000

7. Customer Service Plan

Description

Defining Service Level Agreements and execution of network services and pricing and support—communication of services/sales/marketing—service delivery standards.

Risk

High risk exists in the execution of this activity in defining the levels of service to the departments and assuring these service levels meet or exceed the agency requirements.

Considerations

Things to keep in mind while performing this activity are the need for a service catalog, pricing of services, processes for delivering services and the actual delivery of the service must offer the agencies a value to their business.

Expected Outcome:	This activity will result in a defined plan for service, pricing and delivery.
Timeframe:	6 Months
Cost:	$150,000

8. Migration Plan

Description

Definition of timeframe and tactical migration from current state to future state—design stage of actual implementation.

Risk

There is a moderate risk with this activity as the migration plan is vital to the technology availability to the end users.

Considerations

The legislature needs to be communicated with regarding this plan. The topology and hardware plans need to be continually revisited to assure the technology continues to be viable. Business requirements are vital to this plan. Finally, in addition to this activity being dependent on previous activities output, it is also dependent on the architecture and enterprise portfolio management office for standards and implementation.

Expected Outcome:	An actionable plan for migrating from the current state to the future state for infrastructure leverage will be the outcome of this activity.
Timeframe:	12 Months
Cost:	$250,000

9. Implementation Plan

Description

Tactical planning of executing the migration plan.

Risk

This activity bears high risk due to the impact on department business. Maintaining a business requirements framework in the plan is vital to overcoming this risk.

Considerations	
The key considerations in the successful completion of this activity remains adequate funding and human resource participation. Successfully working with the architecture, data center and EPfMO teams are essential.	
Expected Outcome:	The outcome for this activity is the tactical plan for the execution of the migration plan.
Timeframe:	3-6 Months
Cost:	$25,000

Cultural Impacts

Small agency division of duties vs. dedicated staff in larger agencies.
Dual functions in the field.
Can lose good people if you fail to communicate/morale/productivity.
Must keep people in mind.
Change management.
Specialization of job functions.
Constant communication to customer base to keep customer part of organization/change management and communication.